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THE ROLE OF WATER LEGISLATION IN A DEVELOPING COUNTRY

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THE ROLE OF WATER LEGISLATION IN A DEVELOPING COUNTRY.

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A. INTRODUCTION.

This paper discusses the principles and methods of operation of a water law in a state suffering from a shortage of water. Let us immediately clarify the concepts necessary in determining the scope of the problem. The concept of "water shortage" is now in widespread use in the whole world, and not particularly in arid countries. The expression has been used to describe a variety of situations among which we should differentiate. We will state that a water shortage can be expected in a particular society, where the water resources available to it are not sufficient to maintain the current level of consumption, or the level expected in the foreseeable future, and where these resources are insufficient for carrying out those development plans which are essential to the growth and advancement of the society. The concept must always be related to a particular society in a specific geographical region for otherwise it lacks all content. A particular region of a state may suffer from a shortage of water, while the water resources of the state as a whole are sufficient for its maintenance and development. A whole state with all its component regions may suffer from a water shortage which even the development of all its water resources, including large-scale water projects, exploitation of sewerage water, etc. cannot relieve to the extent of enabling it to carry out all its development plans, or removing the restriction of its natural growth. A whole state may suffer from a water shortage even when there are certain local surpluses of water. The extent of the problems dictates the means to be used to correct the situation, including the legal framework and regulations necessary.

The question arises what are the needs of the existing and expected future population of the state, or in other words what is that "public interest" mentioned in the water laws of many countries, according to which the water resources of the state should be planned and allocated. It is clear that this concept goes far beyond water matters, and in fact the satisfactory organisation and administration of water matters is a part of the "public interest".

We may say that it is that concentration and unification of all the national planning of all sectors of the society and economy of a particular state which has been adopted by the legislature, or by the administration (if the legislature has delegated this power to it). Concentration, unification and the fixing of priorities among different programmes do not yet exist in many states. It does not follow that the public interest does not exist in these states, but simply that official expression has not been given to it. The "public interest" is thus the supreme national plan which unifies all social, economic, security, political and sanitary considerations existing in a particular society, in order to achieve the maximum social and economic advancement of the state.

Water planning must be an instrument in the realisation of this supreme national plan, in whatever form it exists at each stage of the development of the state. In addition it must direct this national planning by collection of all the data on the water resources of the state and the possibilities for their exploitation by means of large-scale water projects or by other means such as water rationing, water pricing policy etc.

The water law is the means for carrying out water planning and thus indirectly for executing social and economic decisions relating to such matters and dispersion of population, types of settlement and the physical planning of the state.

If the wide powers that such a law must confer on the water administration are granted within a framework of general water planning, which is coordinated with the supreme national plan, then the exercise of discretion on the part of the water board will tend in the largest possible degree to be in the direction of the public interest, and it will be possible in this way to manage the water interests of the state in a planned, well-considered and consistent manner.

B. BASIC PRINCIPLES OF WATER LEGISLATION.

1. In planning the exploitation of the water resources of an arid country, all sources of water in the state should be treated as belonging to a single system, without regard to the traditional division between underground and surface water, etc., The administration of all the water affairs of the country should be in the hands of a single body responsible for dealing with all problems connected with water: the exploitation and development of water resources; drainage and flood prevention, water conservation, water measurement, determination of norms for the efficient and economical use of water.

This water-administration is responsible for the distribution of all the country's water resources, but it is clear that it is not for it to determine what use of water is in the best interests of the national economy and for the development of the country. If there is an overall development plan, it will be among the functions of the water administration to fix a water policy which will further the execution of this plan. We may assume that most countries do not have over-all development plans, even when they do have various partial plans and their policy-makers know the general trends which they wish to follow in the development of the country. In this state of affairs the water administration is faced with a difficult and responsible task - allocation of the available water resources in the public interest, without any clear directives as to what constitutes the public interest. The process is generally as follows. The water administration initiates the legislation for control of the water resources, legislation which gives it extensive powers, which in large measure enable it to dictate development policy for the whole state. If the water administration is given the right to divide the sources of water by suitable licensing provisions, in the absence of an official development plan, the principles adopted by this administration will determine the development of the economy.

However, to postpone water legislation in such a country until an overall development plan has been decided upon and to allow free withdrawal of water until such time, will lead to the destruction of water resources and the loss of an essential element for progress in any arid country developing at a modern pace.

In order to overcome this difficulty the water administration must be required to base its water policy on the existing development plans of the state. Such a policy will enable it to make its decisions on a uniform basis, and to avoid contradictory decisions in relation to water allocation. In other words a plan, even if only partial, which makes it possible to allocate water systematically and consistently among consumers and among different uses is preferable to complete absence of a plan, which leaves the state without any guiding principle in dealing with eachseparate request for a water ration. Undoubtedly in most existing states there is sufficient data for the preparation of an approved outline plan to serve as a directive as to the declared policy of the government. If details are lacking, it would be part of the function of the water administration to see that they were collected and collated by the bodies qualified to do this.

2. It appears from the above that a nation's water laws should provide the widest possible framework for the execution of policy within a framework of flexible directives. The various water uses should be specified in the law, but priorities among them should be fixed not by the law itself but by the administration, having regard for plans which will be drawn up from time to time. The water administration should have the widest discretion, to be based on all the factors affecting the public welfare, as expressed in the policy adopted by the government. However this discretion must be subject to legal supervision. The rights of the individual must be protected as far as possible, but they must not be allowed to prevent any action necessary for the development and advancement of the society and the economy. Water prices must be controlled, but market forces should be allowed to continue to operate as far as possible.

3. The Israeli legislation took into account this two-way effect. The law places wide authority and discretionary powers in the hands of the water commissioner - but requires that these powers be exercised only after careful consultation with representatives of the consumers and the water suppliers. For this purpose the law established a Water Board which must be consulted before the water administration authority reaches decisions in all major decisions on water policy. The majority of members of the Board are representatives of the public, the minority civil servants, whose membership serves to assure that there will be full coordination among government departments in carrying out water policy. In addition the law requires that before any decision directly affecting the essential interests of consumers and suppliers e.g. water prices, special levies on water, etc., is reached, the authorities must hold public hearings, to enable the general public to express opinions on these matters and to consider the views expressed by the public, before fixing and adopting the principles concerned.

The Israel legislation went even further in the matter by setting up a special tribunal to deal with water problems. The tribunal is composed of one professional judge and two representatives of the public selected by the judge from a list drawn up by the Minister of Agriculture. This tribunal has the power to review all ad-hoc decisions of the Water Commisioner. The most important of these relate to the refusal to grant licenses, and to the conditions of licenses. In this way the public participates in reviewing every decision of the Water Commission against which any interested party wishes to appeal. There is a right of appeal from this tribunal to the Supreme Court of the state. Thus effective judicial review of all administrative decisions relating to water is assured.

4. We will now go on to consider a further point connected with the above - the protection of existing rights. The law should protect as far as possible the rights which existed before its enactment, to the extent that use was made of these rights. A water right of which use is made is private property like any other private property, even when there is public ownership of the water itself. The law must acknowledge the existence of this property and as far as possible leave it in the hands of its current owners. On the other hand it is most appropriate to regard any water use as a use under the law, and to include rights which existed before the passing of the law within the licensing framework. If we start from the assumption that water resources require unified central control and maximum rational exploitation, no great importance is to be attached to the fact that a right was in existence before the passing of the law. In short, an existing right must be acknowledged, subject to the same restrictions as a right granted under the law i.e. it may be reduced, norms may be fixed for it or a change of source of supply required.

The revocation of a water right must in most cases be accompanied by suitable compensation. The only case where this is not true is where water rights are cut down as a consequence of rationing in a whole region, where the water resources are not sufficient to maintain the existing level of water use, and the state therefore decides on a particular water regime in order to safeguard the future of the region.

Israel's water legislation goes very far in the protection of existing rights. For instance a water right cannot be expropriated simply because the water is needed for a regional or even a national project. It is possible to expropriate the source of the water for this purpose, but the owner is entitled to the same quantity of water as before, either from the project or from some other source. In addition a right which existed before the law was passed cannot be transferred to another purpose or another use by some other person, even if this other use is more desirable and beneficial from the viewpoint of the national economy. (Preference of one right over another is allowed in the rationing zones mentioned above.) The

principle on which this approach is based is clear. The water law is not a planning law in itself, but an aid to national planning. If it was possible to expropriate water rights for the benefit of large-scale enterprises, or to give preference to certain water rights over others by means of the law, this would imply that planning of the national economy had been delegated to the water authority, a situation which is regarded as untenable. However once the national planning or planning in a certain specified sector is adopted by the legislature, water rights should be expropriated by the water administration within the framework of this planning.

5. In rationing zones less regard might be given for the rights of the individual. The reference is to regions in danger of social and economic collapse because of the exhaustion of water resources, exhaustion due to excessive withdrawals and not to seasonal or chance variations. Such a region must be protected from degeneration and destruction by much more stringent measures, likely to have an adverse effect on the rights of individuals, than would be appropriate in regions where the use of water resources is being planned for the future. In such a region the authorities must have the right to fix maximum quantities for various uses, to forbid certain uses altogether, and to determine priorities among uses. What is involved here is not planning of the national economy but preservation of the status as far as possible. In the payment of compensation the property holders adversely affected by these arrangements, the principles enumerated above are not to be followed since the exhaustion of water resources is due to the activities of the region itself and the arrangement is for the benefit of the inhabitants of the region. A sharp distinction must be made between rationing arrangements and planning on a regional or national scale for the development of new water resources, and the transfer of water from one region to another. Such projects are part of the water policy which serves to make possible the execution of the overall national economic plan. Decisions on such activities must be based on economic, security, social and administrative considerations. In this context the overall national plan adopted by the state may determine that a specific region suffering from an acute water shortage should not be developed any further; there may be scope for the transfer of population or for the transfer of certain water uses to other regions. Even though they arise from a certain state of the water supply, these are problems of overall planning, and the far-reaching decisions involved must be very carefully weighed in the light of the criteria mentioned above, as they influence the whole structure of the national economy. It is in the period before a final decision is reached that the emergency measures mentioned above are necessary.

There must be the fullest public participation in arriving at decisions which may shake the social and economic foundations of the regions affected. Before rationing ordinances are promulgated an extensive programme of public education must be undertaken, the public's views on the steps proposed must be heard, ways must be sought to minimise the damage to the property of individuals and the courts must be allowed to test the fairness of the allocations.

Even the best technical and economic plan cannot succeed if there is no public understanding of the nature and purpose of the steps proposed.

6. The last question to which we must give our attention is that of compensation for damage to property resulting from the administration of water policy. It is clear that if the setting up of a public water project will make it necessary to expropriate property (including water rights) full and fair damages should be paid, as is the case when establishing any other type of enterprise for the public purposes. In respect of payments of compensation in rationing zones, we have expressed our opinion above.

7. In any discussion of the principles on which water laws must be based, and whose execution the water administration must supervise on a national basis in a water scarce country, the question of water prices must be mentioned. Water, either as a commodity or a service, has a price. Its transport to a particular place involves costs. In a state with limited water resources, the price of water will be influenced by the fact that there is a shortage, particularly as water supply is generally a monopoly service. It is possible to maintain that market forces are the best guide to efficient and desirable water use (except perhaps in the case of drinking water). There are many economists who support this viewpoint, with certain reservations, but it is obvious that it is not appropriate to the conditions of a country which is faced with a water shortage. The allocation of water resources among the different sectors cannot be made on economic grounds alone, for social, security, psychological and political considerations deserve to be given no less weight than the economic ones. Thus water prices cannot be left to consumers and suppliers without supervision, in order to fix ceiling prices for certain uses. The desirable trend is that there should be intervention only when one of the parties requests the arbitration of the authorities. Another problem is that of water pricing for a large-scale regional or national project, where the cost of the water varies at the different points of supply. Moreover, in different parts of the country there may, for geographical and topographical reasons, be different water prices. In order to carry out the division of water resources among the different regions of the state, the water administration has to have the power to determine water prices so that it will be possible to fix prices within the ability to pay of the different sectors of the economy in different parts of the country. The legislation should limit the discretion of the water authorities in this matter and require that they take into account the economic viability of the water enterprises on the one hand, and the ability to pay of the various sectors and regions on the other. A water supply system, even if it is a public enterprise, should not be obliged to function at a loss, while a water price in excess of the ability to pay of the consumers of a particular sector will interfere with the realisation of the national development plan. These two principles together may lead to the dilemma of choice between a loss to the supplier and a price beyond the ability of the consumer to pay. To meet this dilemma the government must adopt an appropriate policy of subsidisation - by means of an equalisation fund as in the Israel law, or by some

other means, drawing on the national exchequer. However, this is not the place to discuss this complicated problem, which is deserving of special attention. It is sufficient to emphasise here that wherever water occupies a central place in the national development plans of a particular state, legal means must be established for the control of water prices.

C. PROBLEMS IN THE IMPLEMENTATION OF WATER LAW

1. Any water law involves considerable limitation of the freedom of the individual; this expresses itself in limiting individuals in the full enjoyment of their property, and in limiting private enterprise in the development and management ofprojects. A water law which requires a license from a central authority for the use of water, and fixes priorities among uses according to various criteria, without taking into account that the source of the water lies in or crosses a particular area of land, limits the rights of land-holders in their property. It may be assumed that in every country, prior to the passing of a modern water law, there were certain accepted practices which regulated the relations among landowners bordering a single source of surface water. However, regulations affecting ground water as well as surface water which sever the connection between water rights and ownership of land and require licensing are an innovation in most cases. This innovation, although it is essential in a water scarce country, is bound to come up against stiff opposition, from property-holders. The greatest difficulty is in gaining acceptance for the principle and in implementing the licensing system by means of the water law. It must be remembered that from the moment the law as proposed by us is passed, a person may no longer drill for water in his own land and use the water as he pleases, nor may he divert water from a river crossing his own land. These are rights which will not be relinquished easily, whatever the rational justification for their limitation. Thus it is natural that there will be opposition to the law from all sectors and only a water administration equipped with adequate data and detailed plans, carrying out a sensible programme of public education, will be able to get a comprehensive water law, capable of fulfilling the functions enumerated above, passed.

2. An additional problem to be mentioned in this context is the conflict between the existing economic and social framework andthe principles of a modern water law. The purpose of the law is to assure economical and efficient use of water, whereas in any society there are undoubtedly uses which are neither economical nor efficient. For instance, there might in a particular area be small holdings, which if farmed together by a single organisation, could increase the efficiency of water use; a region in which it would be reasonable to develop industry at the expense of agriculture, etc. etc. The water consumers involved will undoubtedly demand the continuance of their water rights, and so prevent the maximum exploitation of water resources. Much thought will have to be given to many criteria other than the economic, such as the desire to preserve a certain type of settlement or a certain way of life, dispersion of the population, preservation of natural beauty, etc. In other words, there is no automatic identity between the most desirable and the most economic use of water, for the economics is only one of the factors to be considered in overall planning, and the law must allow all factors to be taken into consideration.

D. THE STRUCTURE AND FUNCTION OF THE WATER ADMINISTRATION.

1. From the above the task of the water administration in a water scarce developing country becomes clear. It is a double task - the drafting of the water laws necessary to the stage and the administration of these laws after they are passed. In order to carry out these tasks the water authority must be an integrated body with all the professional skills and knowledge necessary for the drafting and securing the adaption of the law, and afterwards for its administration. It should not be required of the water administration that it collect and collate all the data necessary in creating a water policy, which is auxiliary to national planning. However, the water administration must have sufficient information and authority to formulate a water policy coordinated with national planning policy. For this purpose it must centralise statistical data, economic development plans for the various sectors, plans for the dispersion and forecasts of the future growth of population, and physical planning of the state. From this and much other data it must prepare plans for the allocation of the water resources of the state. These water resources include not only surface and ground water, but also the exploitation of sewerage water and sea water. This plan should carry much weight in decision-making, but it must not be forgotten that it is only one of a number of factors shaping the overall national plan. The law should guarantee that all development plans should be examined by the water administration, and should not be carried into practice without its approval. Since in most states exist only partial and uncoordinated plans of various governmental bodies, with no order of priority fixed among them, it is possible that each planning department will be interested in advancing its own plan; Lack of coordination will bring confusion and make it impossible to carry out any one of the plans. Water does not have to be the deciding factor, but it is one of the central factors which must be taken into consideration, so that it may be clear what the future holds for the project being examined. All the development plans must be concentrated in the hands of the water administration. Water allocation for any purpose will be carried out by means of licensing, taking account of present water use and existing rights in the region, and other development plans, in addition to hydrological considerations. Only in this way is it possible, in the absence of an over-all plan, to achieve a reasonably fair distribution of the water, and at least to avoid the creation of situations which will prevent the execution of a national plan in the future.

2. Without discussing in detail the structure of the water administration, it is clear that it must include professional units capable of collecting and processing data and of reaching conclusions both about the future (the development plan) and on an ad hoc basis. Every request for a water allocation must be examined both in the light of existing general plans and on its specific merits. The water administration must have the necessary knowledge to reach decisions at both these levels, and to justify its decisions to the public, and if necessary before the courts. The courts will weigh these decisions both in the light of national plans and in that of the

specific concrete facts before them in the particular case. In order to pass judgment they require a well-reasoned and carefully drawn up account of all the facts of the case and this must be provided by the water administration. The water administration requires a team of economists to examine the economic aspects of plans and to direct the use of water into efficient and economical channels by means of water pricing policy, subsidies and taxes. It requires a legal unit to supervise the execution of the law, for however well formulated a law may be and however comprehensive in its scope, it is not of much value if it is not enforced. The holder of a license who does not conform to its conditions and does not observe the norms and rules for efficient water use, undermines the purposes for which the law was passed. It is essential that the water administrator supervises the withdrawal and use of water on a national scale. This gives rise to many problems. Legal and administrative, but only a well implemented law can be of any benefit to people of the state.

E. CONCLUSION.

In conclusion it may be said that the water administration and the law which it administers, fulfill an important function in the development of the state, and in maintaining its very existence. Without a highly developed water administration with wide powers, the planned development of a state is not possible. Even so, it must be emphasised that the water administration is only a single link in the chain of planning of a developing country. Possibly it is in larger measure the executive arm of the planners, but particularly because of this care must be taken that it does not become an independent planning force, determining the direction of development for it is not the economy of the country alone which is being discussed, but the development of that economy with its far-reaching effects on the social framework, way of life, and achievement of political and social aims. Certainly the water administration should not be the decisive force in these fields, but only a means of testing the feasibility of execution of plans proposed, and an instrument for their achievement.

The Israeli Water Law of 1959, now being implemented by the Water Commission of Israel embodies the principles discussed in this paper. The experience of these 3 years gives good cause for belief in the soundness and applicability of these principles.

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